

GenCore version 5.1.4\_p5\_4578  
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OM protein - protein search, using sw model

Run on: April 27, 2003, 08:52:11 ; Search time 28 Seconds  
(without alignments)  
710.708 Million cell updates/sec

Title: US-09-836-960-5  
Perfect score: 1097  
Sequence: 1 MYSAPSACTCLCLHLLCF.....PFKYTTVTKRSRRIRTPHA 207

Scoring table: BLOSUM62  
Gapop 10.0 , Gapext 0.5

Searched: 283224 seqs, 96134422 residues

Total number of hits satisfying chosen parameters: 283224

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database : PIR\_73:.\*  
1: pir1:.\*  
2: pir2:.\*  
3: pir3:.\*  
4: pir4:.\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match %	Length	ID	Description
1	591	53.9	215	2 G02092	fibroblast growth
2	591	53.9	215	2 A46245	fibroblast growth
3	566	51.6	216	2 JC5972	fibroblast growth
4	194	17.7	194	1 A36301	fibroblast growth
5	193	17.6	194	2 S49501	keratinocyte growt
6	193	17.6	194	2 I48610	keratinocyte growt
7	190	17.3	194	2 S26049	fibroblast growth
8	190	17.3	413	2 H88481	protein let-756 [i
9	181	16.5	208	2 JC7082	fibroblast somatot
10	172	15.7	194	2 I50710	fibroblast growth
11	172	15.7	208	2 S66486	fibroblast growth
12	172	15.7	208	2 A48137	fibroblast growth
13	171.5	15.6	155	2 S04147	acidic fibroblast
14	171.5	15.6	155	2 D37360	acidic fibroblast
15	170.5	15.5	206	1 TVRHUS	fibroblast growth
16	169.5	15.5	155	1 A60721	acidic fibroblast
17	168.5	15.4	152	2 JH0476	acidic fibroblast
18	167.5	15.3	155	2 JW0055	acidic fibroblast
19	167.5	15.3	192	2 S54407	embryonic fibrobla
20	166.5	15.2	155	1 A33665	acidic fibroblast
21	164	14.9	211	1 JC7353	fibroblast growth
22	164	14.9	212	2 JC7511	fibroblast growth
23	163.5	14.9	97	2 B46289	keratinocyte growt
24	159.5	14.5	155	1 GKBOA	acidic fibroblast
25	159.5	14.5	189	2 A48834	basic fibroblast g
26	159.5	14.5	207	2 JC5940	fibroblast growth
27	159	14.5	187	2 S23595	embryonic fibrobla
28	157.5	14.4	146	1 S00185	basic fibroblast g
29	157.5	14.4	157	1 GKBOB	basic fibroblast g

ALIGNMENTS

RESULT 1

G02092  
fibroblast growth factor 8 precursor - human  
N;Alternate names: androgen-induced growth factor  
N;Contains: fibroblast growth factor 8, splice form A  
C;Species: Homo sapiens (man)  
C;Date: 21-Dec-1996 #sequence.revision 06-Jun-1997 #text\_change 31-Mar-2000  
C;Accession: G02092; S65653; G02394.  
R;Chiu, I.  
submitted to the EMBL Data Library, September 1995  
A;Reference number: H00790  
A;Accession: G02092  
A;Status: translated from GB/EMBL/DDBJ  
A;Molecule type: mRNA  
A;Residues: 1-215 <CHI>  
A;Cross-references: EMBL:U36223; NID:g1143261; PID:g1143262  
R;Tanaka, A.; Miyamoto, K.; Matsuo, H.; Matsumoto, K.; Yoshida, H.  
FEBS Lett. 363, 226-230, 1995  
A;Title: Human androgen-induced growth factor in prostate and breast cancer cells: 1.  
A;Reference number: S65653; MUID:95255551; PMID:7737407  
A;Accession: S65653  
A;Status: preliminary  
A;Molecule type: DNA; mRNA  
A;Residues: 1-215 <TAN>  
A;Cross-references: EMBL:S78465; EMBL:S78466; NID:g999171; PID:g999172; GB:D38752; N.  
R;Roy-Burman, P.  
submitted to the EMBL Data Library, January 1996  
A;Reference number: H01168  
A;Accession: G02394  
A;Status: translated from GB/EMBL/DDBJ  
A;Molecule type: mRNA  
A;Residues: 1-23.35-215 <ROY>  
A;Cross-references: EMBL:U46211; NID:g1184864; PID:g1184865  
C;Genetics:  
A;Gene: GDB:FGF8; AIGF  
A;Cross-references: GDB:591889; OMIM:600483  
A;Map position: 10q25-10q26  
C;Keywords: alternative splicing; blocked amino end; pyroglutamic acid  
F;1-22/Domain: signal sequence #status predicted <Sig>  
F;23-215/Product: fibroblast growth factor 8 #status predicted <MAT>  
F;23,35-215/Product: fibroblast growth factor 8, splice form A #status predicted <MAV>  
F;23/Modified site: pyrrolidone carboxylic acid (Gln) (in mature form) #status predi

Query Match 53.9%; Score 591; DB 2; Length 215;  
Best Local Similarity 57.3%; Pred. No. 6.3e-45;  
Matches 110; Conservative 35; Mismatches 45; Indels 2; Gaps 2;

QY 1 MYSAPSACTCLCLHLLCFQGVVAEENVDFRIHVENOTRARDVSRKOLRYQLYYSR 60

Db 1 MGSPRSALSCULLHLLVLCQAQTV-QSSPNFTQHVREQLSVTDQLSRRILRYQLYYSR 59

QY 61 TSGRHIQVL-GRRISARGEDGKYAQLLVETDTFGSQVRIKGETEFYLCMNRKGLVGK 119

```
Db 60 TSGKHVQLANKRINAMAEODGPPAKLIVETDTFGSRVRVRGAETGLYICMKNKKGLIAK 119
QY 120 PDGTSKECVIEKLENNYALMSAKYSGWYVGFTHKGRPRKPKGTRENOODVHFMMKRYP 179
Db 120 SNGKGDVTEIVLENNYALQNAKYEGWYMAFTKGRPRKPKGTROHQREVFHMKRLP 179
QY 180 KGPELOKPKFY 191
Db 180 RGHHTTEQSLRF 191

RESULT 2
A6245
fibroblast growth factor 8 - mouse
N:Alternate names: androgen-induced growth factor
C:Species: Mus musculus (house mouse)
C:Date: 21-Sep-1993 #sequence_revision 18-Nov-1994 #text_change 17-Mar-2000
C:Accession: A6245; I49194; S53114
R:Tanaka, A.; Miyamoto, K.; Minamino, N.; Takeda, M.; Sato, B.; Matsuo, H.; Matsumoto, K
Proc. Natl. Acad. Sci. U.S.A. 89, 8928-8932, 1992
A:Title: Cloning and characterization of an androgen-induced growth factor essential for
A:Reference number: A6245; MUID:93028380; PMID:1409588
A:Accession: A6245
A>Status: preliminary
A:Molecule type: mRNA; protein
A:Residues: 1-215 <FAN>
A:Cross-references: GB:D12482; NID:g220324; PIDN:BAA02050.1; PID:d1002532; PID:g220325
A:Experimental source: mammary carcinoma, clone pSC17
A:Note: sequence extracted from NCBI backbone (NCBIN:115358, NCBIP:115360)
R:MacArthur, C.A.; Shankar, D.B.; Shackelford, G.M.
J. Virol. 69, 2501-2507, 1995
A:Title: Fgf-8, activated by proviral insertion, cooperates with the Wnt-1 transgene in
A:Reference number: I49194; MUID:95191029; PMID:7884899
A:Accession: I49194
A>Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: mRNA
A:Residues: 1-23,35-215 <RES>
A:Cross-references: EMBL:U18673; NID:g619919; PIDN:AAA65387.1; PID:g619920
R:Mahmood, R.; Bresnick, J.; Hornbruch, A.; Mahony, C.; Morton, N.; Colquhoun, K.; Marti
submitted to the EMBL Data Library, March 1995
A:Description: FGF-8 in the mouse embryo: a role in the initiation and maintenance of li
A:Reference number: S53114
A:Accession: S53114
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-23,35-215 <MAH>
A:Cross-references: EMBL:248746; NID:g732820; PIDN:CAA88637.1; PID:g732821
C:Genetics:
A:Gene: Fgf-8
C:Keywords: alternative splicing

Query Match 53.9%; Score 591; DB 2; Length 215;
Best Local Similarity 57.3%; Pred. No. 6,3e-45;
Matches 110; Conservative 35; Mismatches 45; Indels 2; Gaps 2;

QY 1 MTSAPSACTCLCHFLLLCFQVQLVAEENVDFRIHVENQTRADDVSRKQLRLYQLXSR 60
Db 1 MGSPRSALELLHLVLCLQAQVTV-QSSPNFTQHVREQLSVTDQLSRRLRTYQLYSR 59

QY 61 TSGKHTOVL-GRRIARGEDGKYAQLLVETDTFGSOVRKKGTEFYLCMNRKGLVGPDTGSKEC 119
Db 60 TSGKHVQLANKRINAMAEODGPPAKLIVETDTFGSRVRVRGAETGLYICMKNKKGLIAK 119

QY 120 PDGTSKECVIEKLENNYALMSAKYSGWYVGFTHKGRPRKPKGTRENOODVHFMMKRYP 179
Db 120 SNGKGDVTEIVLENNYALQNAKYEGWYMAFTKGRPRKPKGTROHQREVFHMKRLP 179

QY 180 KGPELOKPKFY 191
Db 180 RGHHTTEQSLRF 191
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RESULT 3
JC5972
fibroblast growth factor-17 - rat
C:Species: Rattus norvegicus (Norway rat)
C:Date: 16-Jul-1999 #sequence_revision 16-Jul-1999 #text_change 16-Jul-1999
C:Accession: JC5972
R:Hoshikawa, M.; Ohbayashi, N.; Yonamine, A.; Konishi, M.; Ozaki, K.; Fukui, S.; Itoh
Biochem. Biophys. Res. Commun. 244, 187-191, 1998
A:Title: Structure and expression of a novel fibroblast growth factor,FGF-17,preferen
A:Reference number: JC5972; MUID:98183421; PMID:9514906
A:Accession: JC5972
A>Status: preliminary
A:Molecule type: mRNA
A:Residues: 1-216 <ROS>
A:Cross-references: GB:AB009250
```

```
Query Match 51.6%; Score 566; DB 2; Length 216;
Best Local Similarity 54.4%; Pred. No. 1e-42;
Matches 111; Conservative 37; Mismatches 38; Indels 18; Gaps 4;
```

```
QY 11 LCLHFLLLCFQVQLVAEEN---VDFRIHVENQTRADDVSRKQLRLYOLYLSRTSGKHQ 67
Db 12 LCLQLLLCCQYQ----GENHSPNFNQVROGAMTDQLSRQIREYQLYLSRTSGKHVO 67

QY 68 VLGRIRISARGEDGKYAQLLVETDTFGSOVRKKGTEFYLCMNRKGLVGPDTGSKEC 127
Db 68 VTGRRISATAEDGNKFAKLIVETDTFGSRVRKGAESKEYICMNRKGLIGRPSGSKDC 127

QY 128 VFIKVLNNYALMSAKYSGWYVGFTHKGRPRKPKGTRENOODVHFMMKRYPKG----- 182
Db 128 VFTEIVLENNYALQNAKHGWMFAFTQGRPRQASRSRQNGREAHFIRKLYQGQLPFPN 187

QY 183 -PELOKPKFY-----TTVTKRSR 200
Db 188 HAERKQKQFEFGVSAPTRTKRTRR 211
```

```
RESULT 4
A36301
fibroblast growth factor 7 precursor [validated] - human
N:Alternate names: keratinocyte growth factor
C:Species: Homo sapiens (man)
C:Date: 28-Mar-1991 #sequence_revision 07-Jul-1995 #text_change 08-Dec-2000
C:Accession: A36301; A31453; A46289; I51958
R:Finch, P.W.; Rubin, J.S.; Miki, T.; Ron, D.; Aaronson, S.A.
Science 245, 752-755, 1989
A:Title: Human KGF is FGF-related with properties of a paracrine effector of epitheli
A:Reference number: A36301; MUID:89368897; PMID:2475908
A:Accession: A36301
A:Molecule type: mRNA
A:Residues: 1-194 <FIN>
A:Cross-references: GB:M60828; NID:g186738; PIDN:AAA63210.1; PID:g186739; GB:M25295
R:Rubin, J.S.; Osada, H.; Finch, P.W.; Taylor, W.G.; Rudikoff, S.; Aaronson, S.A.
Proc. Natl. Acad. Sci. U.S.A. 86, 802-806, 1989
A:Title: Purification and characterization of a newly identified growth factor specif
A:Reference number: A31453; MUID:89128865; PMID:2915979
A:Accession: A31453
A:Molecule type: protein
A:Residues: 'X', 33-44 <RUB>
A:Experimental source: embryonic lung cell fibroblast line M426
R:Kelley, M.J.; Pech, M.; Seauenez, H.N.; Rubin, J.S.; O'Brien, S.J.; Aaronson, S.A.
Proc. Natl. Acad. Sci. U.S.A. 89, 9287-9291, 1992
A:Title: Emergence of the keratinocyte growth factor multigene family during the grea
A:Reference number: A46289; MUID:93028449; PMID:1409637
A:Accession: A46289
A:Molecule type: DNA
A:Residues: 97-194 <REL>
A:Note: sequence extracted from NCBI backbone (NCBIN:115887, NCBIP:115889)
R:Aaronson, S.A.; Bottaro, D.P.; Miki, T.; Ron, D.; Finch, P.W.; Fleming, T.P.; Ahn,
Ann. N. Y. Acad. Sci. 638, 62-77, 1991
A:Title: Keratinocyte growth factor. A fibroblast growth factor family member with un
A:Reference number: I51958; MUID:92152720; PMID:1664700
A:Accession: I51958
```

A>Status: translated from GB/EMBL/DBJ  
A:Molecule type: mRNA  
A:Residues: 1-194 <AAR>  
C:Cross-references: GB:S81661; NID:g245438; PIDN:AAB21431.1; PID:g245439  
C:Genetics:  
A:Gene: GDB:FG87  
A:Cross-references: GDB:131444; OMIM:148180  
A:Map position: 15q13-15q22  
A>Note: the human genome contains about 16, intron-containing, partial copies of this gene  
C:Superfamily: fibroblast growth factor  
C:Keywords: extracellular protein; growth factor; heparin binding; mitogen  
F:1-31/Domain: signal sequence #status predicted <SIG>  
F:32-194/Product: fibroblast growth factor 7 #status experimental <MAT>

Query Match 17.7%; Score 194; DB 1; Length 194;  
Best Local Similarity 30.6%; Pred. No. 7.1e-10;  
Matches 55; Conservative 34; Mismatches 67; Indels 24; Gaps 7;

Qy 12 CLHLLLCFQVQL---VAENVDRIHV---ENQTRADDVSRKQLRLYQLYSRTSKH 65  
| | | | | : : : : : | | | : : : : : | | : : : |  
Db 18 CFHIIICLVGTISLACNDMTPEOMATNVNCSPPERHTRSDYMEGGDIRVRLFCRTQWY- 76  
| | | | | : : : : : | | | | | : : : : : | | | : : : |  
Qy 66 IQVLGRRISARG-----EDGDKYAQLLVETDTFGSQVRIKGETEFLCMNRKGLYCK 119  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Db 77 -----LRIDKRGKVGKGTQEMKNYINMEIRTVAVGI-VAIKGVESEFLAMNKEGKYAK 130  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Qy 120 PDGTSKECVFIEKVLNNYALMSAKS-----GWVGFTRKGRPKRGPKTRENOQDVHFM 175  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Db 131 KE-CNEDCNFKELILENHNTYASAKWTHSGEMFVALNQKGIPIVRGKTKKEQKTAHFL 189  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |

## RESULT 5

S49501  
keratinocyte growth factor - sheep  
C:Species: Ovis orientalis aries, Ovis ammon aries (domestic sheep)  
C:Date: 20-Feb-1995 #sequence\_revision 20-Feb-1995 #text\_change 16-Jul-1999  
C:Accession: S49501  
R:Mitchell, J.E.A.; McInnes, C.J.  
A:Description: Cloning of a cDNA encoding ovine keratinocyte growth factor.  
A:Reference number: S49501  
A:Accession: S49501  
A>Status: preliminary  
A:Molecule type: DNA  
A:Residues: 1-194 <MIT>  
A:Cross-references: EMBL:Z46236; NID:g559503; PIDN:CAA86306.1; PID:g559504  
C:Superfamily: fibroblast growth factor

Query Match 17.6%; Score 193; DB 2; Length 194;  
Best Local Similarity 31.0%; Pred. No. 8.7e-10;  
Matches 58; Conservative 33; Mismatches 72; Indels 24; Gaps 8;

Qy 5 PSATCICLHLLLCFQVQL---VAENVDRIHV---ENQTRADDVSRKQLRLYQLY 58  
| | | | | : : : : : | | | : : : : : | | : : : |  
Db 11 PSLYRSCFHICLVGTISLACNDMTPEOMATNVNCSPPERHTRSDYMEGGDIRVRLF 70  
| | | | | : : : : : | | | | | : : : : : | | | : : : |  
Qy 59 SRTSGKHIVQLGRISARG-----EDGDKYAQLLVETDTFGSQVRIKGETEFLCMNR 112  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Db 71 CRTQWY-----LRIDKRGKVGKGTQEMKNYINMEIRTVAVGI-VAIKGVESEFLAMNK 123  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Qy 113 KGLVGRPDGTSKECVFIEKVLNNYALMSAK--YSG--WYVGFTRKGRPKRGPKTRE 168  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Db 124 EGKLYAKKE-CNEDCNFKELILENHNTYASAKWTHSGEMFVALNSKGVPIVRGKTKKE 182  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Qy 169 QODVHFM 175  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Db 183 QKTAHFL 189  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |

## RESULT 6

I48610  
keratinocyte growth factor Fgf-7 - mouse  
C:Species: Mus musculus (house mouse)

C:Date: 02-Jul-1996 #sequence\_revision 02-Jul-1996 #text\_change 16-Jul-1999  
C:Accession: I48610; S33227  
R:Mason, I.J.; Fuller-Pace, F.; Smith, R.; Dickson, C.  
Mech. Dev. 45, 15-30, 1994  
A>Title: FGF-7 (keratinocyte growth factor) expression during mouse development sugg  
A:Reference number: I48610; MUID:94242659; PMID:8186145  
A:Accession: I48610  
A>Status: preliminary; translated from GB/EMBL/DBJ  
A:Molecule type: mRNA  
A:Residues: 1-194 <RES>  
A:Cross-references: EMBL:Z22703; NID:g297755; PIDN:CAA80403.1; PID:g297756  
C:Superfamily: fibroblast growth factor

Query Match 17.6%; Score 193; DB 2; Length 194;  
Best Local Similarity 35.8%; Pred. No. 8.7e-10;  
Matches 53; Conservative 26; Mismatches 51; Indels 18; Gaps 6;

Qy 38 ENQTRADDVSRKQLRLYQLYSRTSGKHIVQLGRISARG-----EDGDKYAQLLVETD 91  
| | | | | : : : : : | | | | | : : : : : | | | : : : |  
Db 50 ERHTRSDYMEGGDIRVRLFCRTQWY-----LRIDKRGKVGKGTQEMKNYINMEIRTV 103  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Qy 92 TFGSQVRIKGETEFLCMNRKGLVGPDKGTSGKEVFEKVLNNYALMSAK--YSG- 148  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Db 104 AVGI-VAIKGVESEYFLAMNKEGKYAKKE-CNEDCNFKELILENHNTYASAKWTHSGG 161  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Qy 149 -WYVGFTRKGRPKRGPKTRENOQDVHFM 175  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Db 162 EMFVALNQKGIPIVRGKTKKEQKTAHFL 189  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |

## RESULT 7

S26049  
fibroblast growth factor 7 precursor - rat  
N:Alternate names: keratinocyte growth factor  
C:Species: Rattus norvegicus (Norway rat)  
C:Date: 19-Mar-1998 #sequence\_revision 19-Mar-1998 #text\_change 16-Jul-1999  
C:Accession: S26049; S78446  
R:Yan, G.; Nikolaropoulos, S.; Wang, F.; McKeenan, W.L.  
In Vitro Cell. Dev. Biol. 27, 437-438, 1991  
A>Title: Sequence of rat keratinocyte growth factor (heparin-binding growth factor  
A:Reference number: S26049  
A:Accession: S26049  
A:Molecule type: mRNA  
A:Residues: 1-194 <YAN>  
A:Cross-references: EMBL:X56551  
R:Yan, G.  
submitted to the EMBL Data Library, February 1991  
A:Reference number: S78446  
A:Accession: S78446  
A:Molecule type: mRNA  
A:Residues: 1-16,'p',18-100,'M',102-123,'O',125-150,'S',152-194 <YAN>  
A:Cross-references: EMBL:X56551; NID:g56707; PIDN:CAA39892.1; PID:g56708  
C:Superfamily: fibroblast growth factor  
C:Keywords: extracellular protein; growth factor; heparin binding; mitogen  
F:1-31/Domain: signal sequence #status predicted <SIG>  
F:32-194/Product: fibroblast growth factor 7 #status predicted <MAT>

Query Match 17.3%; Score 190; DB 2; Length 194;  
Best Local Similarity 35.1%; Pred. No. 1.6e-09;  
Matches 52; Conservative 27; Mismatches 51; Indels 18; Gaps 6;

Qy 38 ENQTRADDVSRKQLRLYQLYSRTSGKHIVQLGRISARG-----EDGDKYAQLLVETD 91  
| | | | | : : : : : | | | | | : : : : : | | | : : : |  
Db 50 ERHTRSDYMEGGDIRVRLFCRTQWY-----LRIDKRGKVGKGTQEMKNYINMEIRTV 103  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Qy 92 TFGSQVRIKGETEFLCMNRKGLVGPDKGTSGKEVFEKVLNNYALMSAK--YSG- 148  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Db 104 AVGI-VAIKGVESEYFLAMNKEGELYAKKE-CNEDCNFKELILENHNTYASAKWTHSGG 161  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Qy 149 -WYVGFTRKGRPKRGPKTRENOQDVHFM 175  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |  
Db 162 EMFVALNQKGIPIVRGKTKKEQKTAHFL 189  
| | | | | : : : : : | | | | | : : : : : | | | | | : : : : : |



Db 61 LRRRLYCRT-GRHLEIFPNNGTQTGRKDHRSRFGILEFISIAVG-LVSIKGVDSGLYGM 118  
QY 111 NRKGLVGPDKGTSKSCVFTEKVLNNYALMSAKYS-----GWYVGFKKGRPKRGPK 164  
Db 119 NEKGELYS-EKLTQECVFPREQEENWNTYSSNLKHKHVDTGRRYYVALNKDGTTPRGTR 177  
QY 165 TRENQDQVHMKR--YPKGOPELOK 187  
Db 178 TKRHRQFTFLPRPVDPKVPPELYK 202

## RESULT 12

A48137  
fibroblast growth factor 9 - human  
N:Alternate names: glia-activating factor  
C:Species: Homo sapiens (man)  
C:Date: 21-Jan-1994 #sequence\_revision 18-Nov-1994 #text\_change 21-Jul-2000  
C:Accession: A48137  
R: Miyamoto, M.; Naruo, K.; Seko, C.; Matsumoto, S.; Kondo, T.; Kurokawa, T.  
Mol. Cell. Biol. 13, 4251-4259, 1993  
A: Title: Molecular cloning of a novel cytokine cDNA encoding the ninth member of the fibroblast growth factor family  
A: Reference number: A48137; MUID: 93309459; PMID: 8321227  
A: Accession: A48137  
A: Status: preliminary  
A: Molecule type: nucleic acid  
A: Residues: 1-208 <MIY>  
A: Cross-references: GDB: D14838; NID: g391718; PIDN: BAA03572.1; PID: g391719  
A: Experimental source: foreskin  
A: Note: sequence extracted from NCBI backbone (NCBIN: 134640, NCBI: 134641)  
C: Genetics:  
A: Gene: GDB: RGF9  
A: Cross-references: GDB: 207221; OMIM: 600921  
A: Map position: 13q11-13q12  
C: Superfamily: fibroblast growth factor

Query Match 15.7%; Score 172; DB 2; Length 208;  
Best Local Similarity 35.2%; Pred. No. 6.8e-08;  
Matches 51; Conservative 22; Mismatches 60; Indels 12; Gaps 6;

QY 52 LRLYLYSRTSGKHQVL-GRRISARGEDGDKYAQLLVETDFGSOVRKIKGKETEFYLCM 110  
Db 61 LRRRLYCRT-GRHLEIFPNNGTQTGRKDHRSRFGILEFISIAVG-LVSIKGVDSGLYGM 118  
QY 111 NRKGLVGPDKGTSKSCVFTEKVLNNYALMSAKYS-----GWYVGFKKGRPKRGPK 164  
Db 119 NEKGELYS-EKLTQECVFPREQEENWNTYSSNLKHKHVDTGRRYYVALNKDGTTPRGTR 177  
QY 165 TRENQDQVHMKR--YPKGOPELOK 187  
Db 178 TKRHRQFTFLPRPVDPKVPPELYK 202

## RESULT 13

S04147  
acidic fibroblast growth factor 1 - rat  
N:Alternate names: heparin-binding growth factor 1  
C:Species: Rattus norvegicus (Norway rat)  
C:Date: 28-Feb-1990 #sequence\_revision 28-Feb-1990 #text\_change 16-Jul-1999  
C:Accession: S04147  
R: Goodrich, S.P.; Yan, G.C.; Bahrenburg, K.; Mansson, P.E.  
Nucleic Acids Res. 17, 2867, 1989  
A: Title: The nucleotide sequence of rat heparin binding growth factor 1 (HBGF-1).  
A: Reference number: S04147; MUID: 89240051; PMID: 2470029  
A: Accession: S04147  
A: Molecule type: mRNA  
A: Residues: 1-155 <GOO>  
A: Cross-references: EMBL: X14232; NID: g56351; PIDN: CAA32448.1; PID: g56352  
C: Superfamily: fibroblast growth factor  
C: Keywords: growth factor; heparin binding

Query Match 15.6%; Score 171.5; DB 2; Length 155;  
Best Local Similarity 32.0%; Pred. No. 5.4e-08;  
Matches 39; Conservative 29; Mismatches 49; Indels 5; Gaps 4;

QY 57 LYSRTSGKHQVL-GRRISARGEDGDKYAQLLVETDFGSOVRKIKGKETEFYLCMNRKGK 115  
Db 29 LYSNGGHFLRILPDGTVDGTRDRSDQHIQLQLSAESAG-EVYIKGTETGQYLAMDTEGL 87  
QY 116 LVGKPDGTSKCVFIEKVLNNYALMSAKYS--GWVVGFTKKGRPKRGPKTRENQDQVH 173  
Db 88 LYGS-QTPNEECLFLERLEENHYNTYTSKHAENWVGLKNGSKCRGRPRTHYGOKAIL 146  
QY 174 FM 175  
Db 147 FL 148

## RESULT 14

D37360  
acidic fibroblast growth factor - mouse  
N:Alternate names: aFGF; FGF-1  
C:Species: Mus musculus (house mouse)  
C:Date: 17-Apr-1993 #sequence\_revision 17-Apr-1993 #text\_change 16-Jul-1999  
C:Accession: D37360; JC5231  
R: Hebert, J.M.; Basillio, C.; Goldfarb, M.; Haub, O.; Martin, G.R.  
Dev. Biol. 138, 454-463, 1990  
A: Title: Isolation of cDNAs encoding four mouse FGF family members and characterization of their promoters  
A: Reference number: A37360; MUID: 90201563; PMID: 2318343  
A: Accession: D37360  
A: Status: preliminary  
A: Molecule type: mRNA  
A: Residues: 1-155 <HEB>  
A: Cross-references: GB: M30641; NID: g193284; PIDN: AAA37618.1; PID: g309236  
R: Madhail, F.; Hackshaw, K.V.; Chiu, I.M.  
Gene 179, 231-236, 1996  
A: Title: Cloning and characterization of the mouse Fgf-1 gene.  
A: Reference number: JC5231; MUID: 97128312; PMID: 8972905  
A: Accession: JC5231  
A: Status: preliminary  
A: Molecule type: DNA  
A: Residues: 1-155 <MAD>  
A: Cross-references: GB: U36456  
C: Comment: This protein is an inducer of neovascularization in angiogenic disease in C: Genetics:  
A: Gene: Fgf-1  
A: Introns: 57/1; 91/3  
C: Superfamily: fibroblast growth factor

Query Match 15.6%; Score 171.5; DB 2; Length 155;  
Best Local Similarity 32.0%; Pred. No. 5.4e-08;  
Matches 39; Conservative 29; Mismatches 49; Indels 5; Gaps 4;

QY 57 LYSRTSGKHQVL-GRRISARGEDGDKYAQLLVETDFGSOVRKIKGKETEFYLCMNRKGK 115  
Db 29 LYSNGGHFLRILPDGTVDGTRDRSDQHIQLQLSAESAG-EVYIKGTETGQYLAMDTEGL 87  
QY 116 LVGKPDGTSKCVFIEKVLNNYALMSAKYS--GWVVGFTKKGRPKRGPKTRENQDQVH 173  
Db 88 LYGS-QTPNEECLFLERLEENHYNTYTSKHAENWVGLKNGSKCRGRPRTHYGOKAIL 146  
QY 174 FM 175  
Db 147 FL 148

## RESULT 15

TVH0HS  
fibroblast growth factor 4 - human  
N:Alternate names: heparin secretory transforming protein 1; Kaposi sarcoma oncogene C:Species: Homo sapiens (man)  
C:Date: 31-Mar-1989 #sequence\_revision 31-Mar-1989 #text\_change 18-Jun-1999  
C:Accession: A28417; A29876; A29649  
R: Yoshida, T.; Miyagawa, K.; Odagiri, H.; Sakamoto, H.; Little, P.F.R.; Terada, M.; Proc. Natl. Acad. Sci. U.S.A. 84, 7305-7309, 1987  
A: Title: Genomic sequence of hst, a transforming gene encoding a protein homologous to A: Reference number: A28417; MUID: 88041096; PMID: 29595959

Search completed: April 27, 2003, 15:01:21  
Job time : 29 secs